

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Drawing title:

LoRa+WUR Sensors Node

Drawing number: 1

Rev: 3.0

Format: Laboratory: Integrated Systems Laboratory

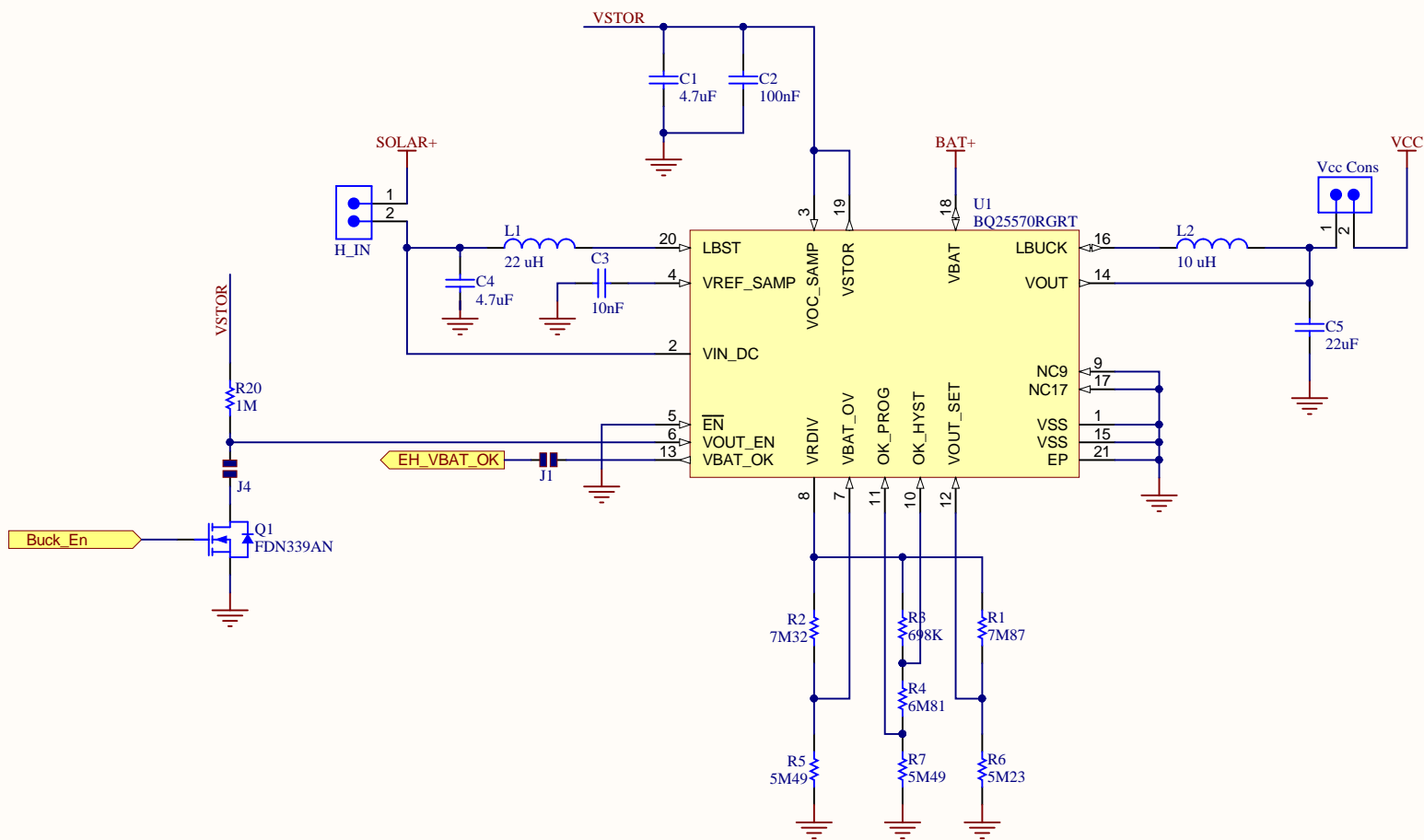
Project: MSP430.SchDoc

Date: 28.06.2017 14:55:29

A4 Q Drawn by: Akos Pasztor

Page 2 of 6

File: C:\Users\akos\Documents\LoRa\pcb\LoRa+WUR Sensors Node V3.0\MSP430.SchDoc



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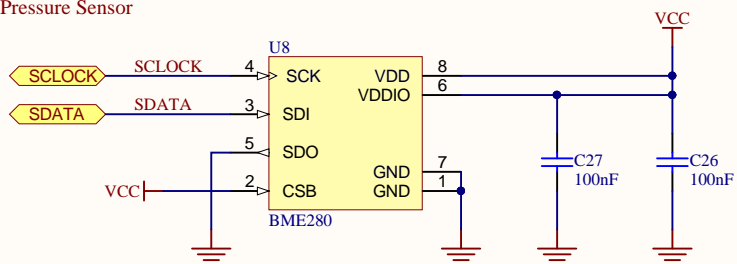
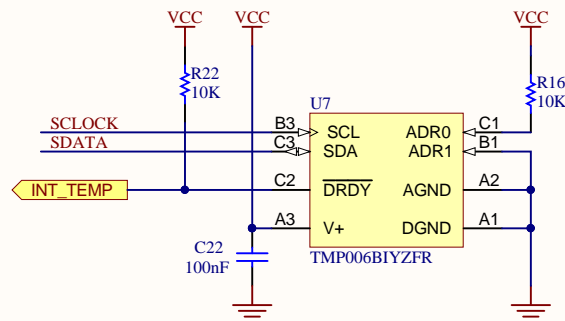
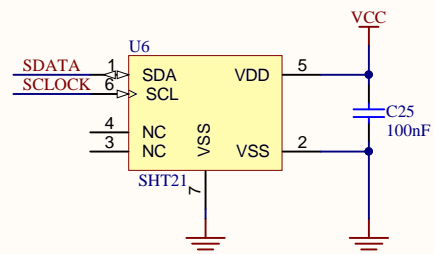
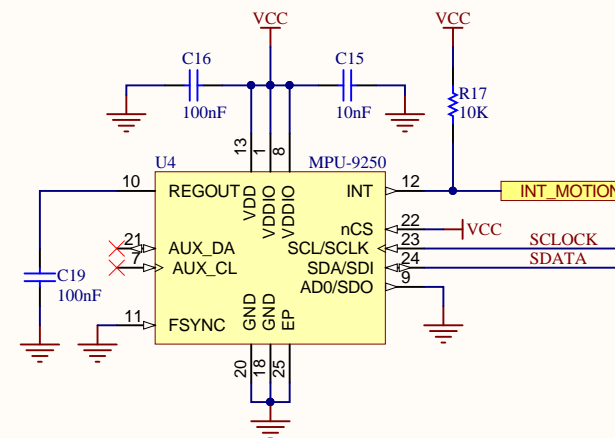
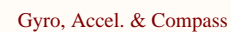
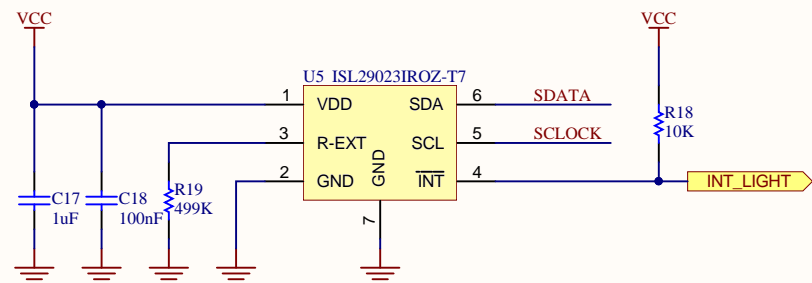
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Date: 28.06.2017 14:55:30

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Page 3 of 6

File: C:\Users\akos\Documents\LoRa\pcb\LoRa+WUR Sensors Node V3.0\Harvester.SchDoc



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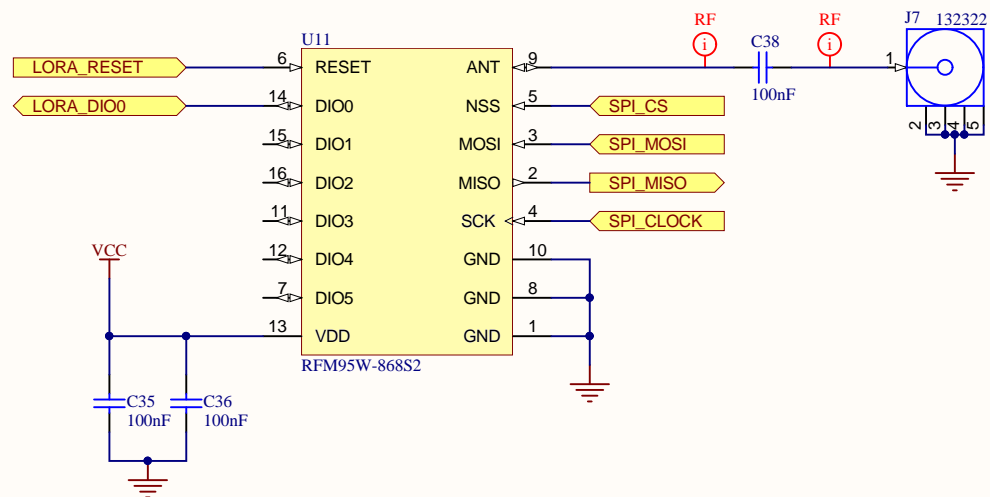
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Date: 28.06.2017 14:55:30

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Page 5 of 6

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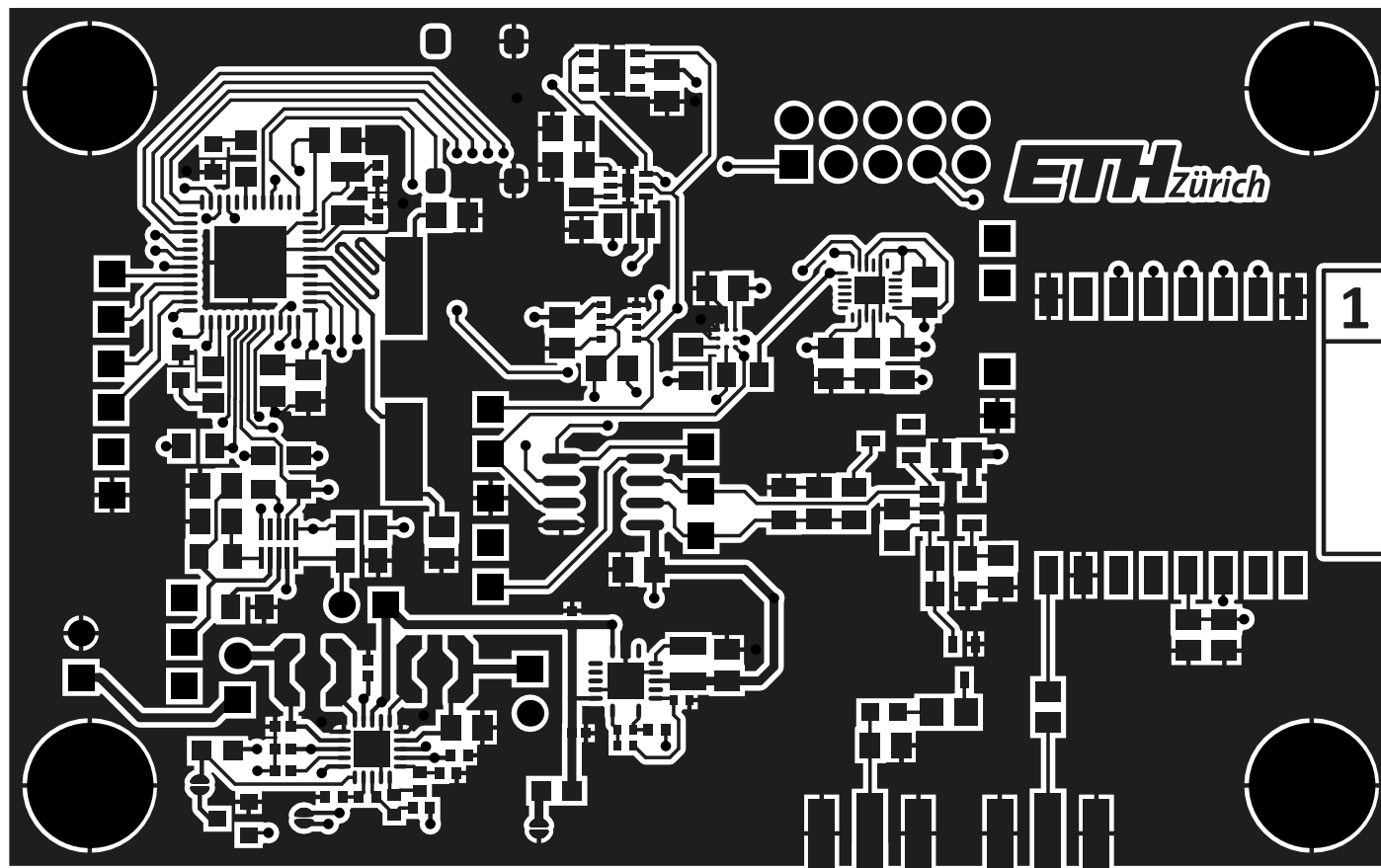
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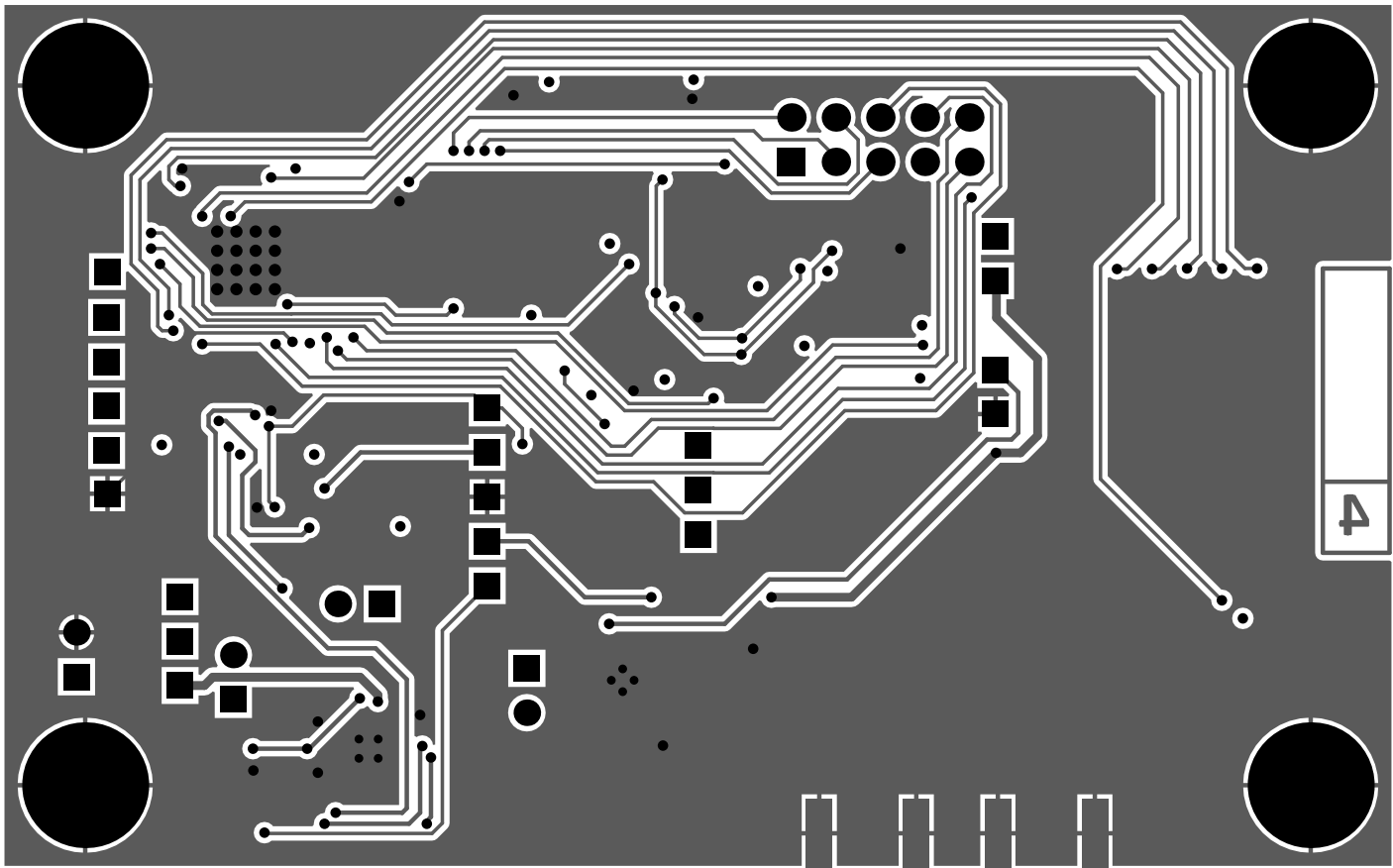
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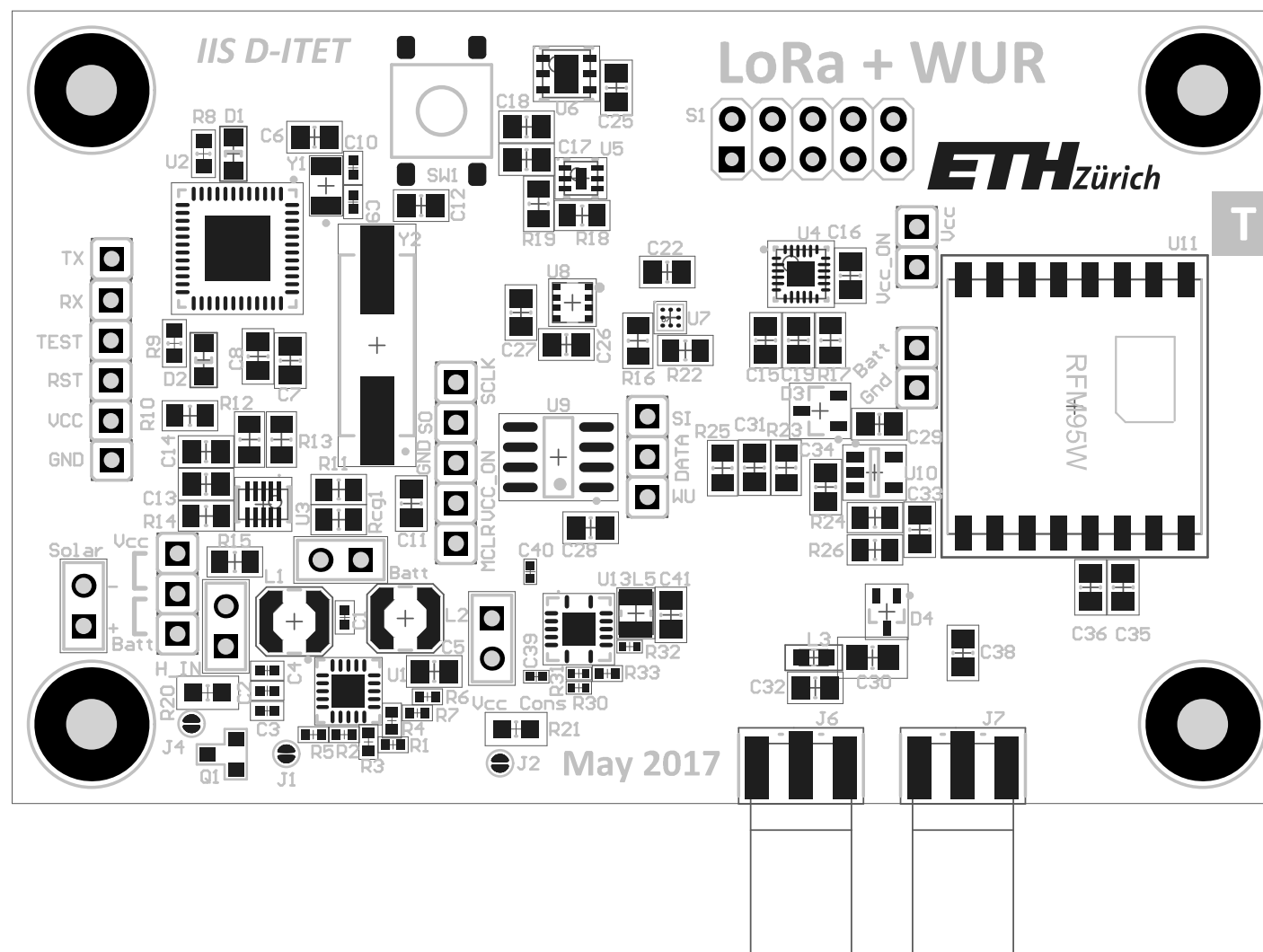
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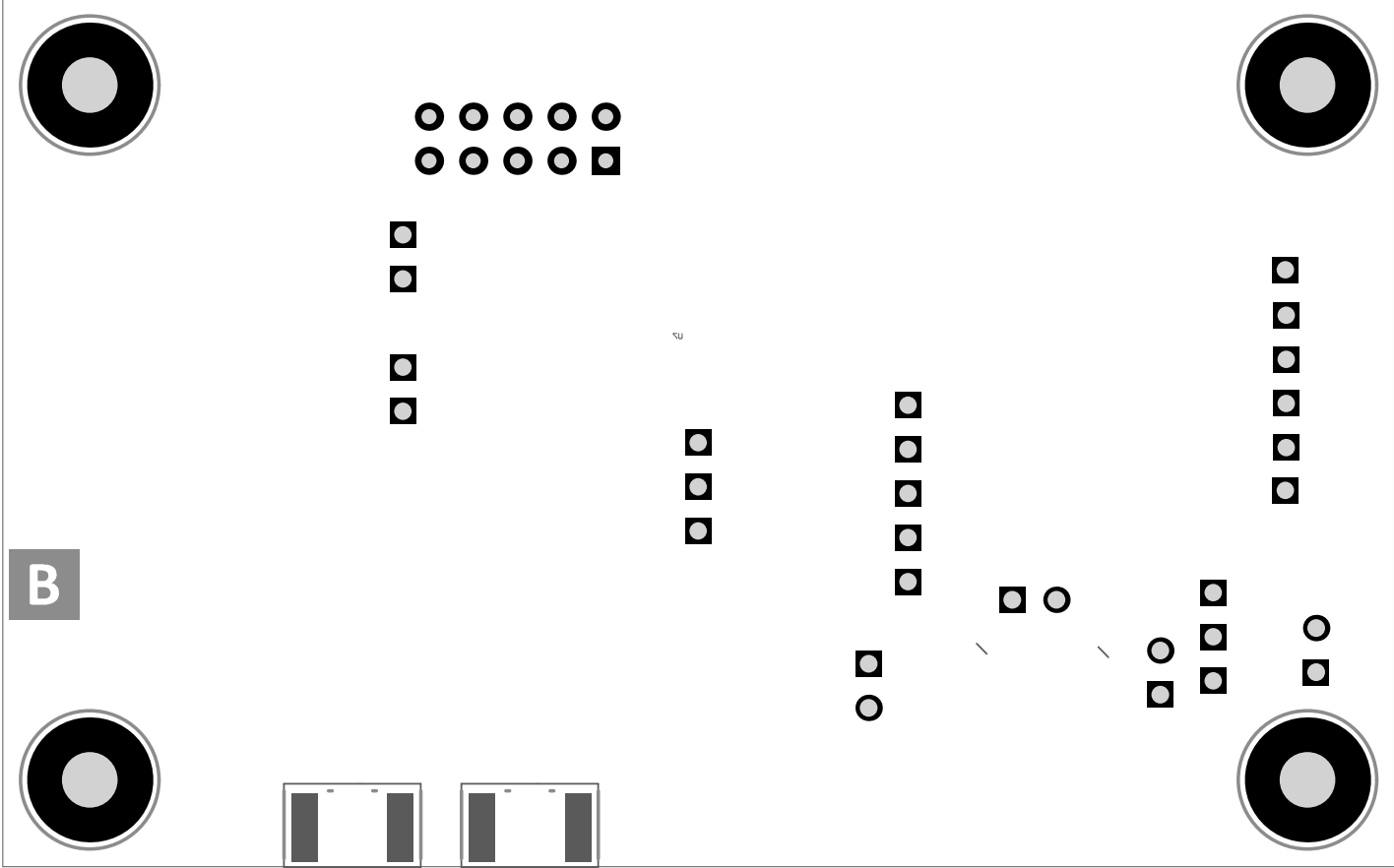
Page 6 of 6

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Designator	Comment	Footprint	LibRef	Manufacturer Part Number 1	Quantity
C1, C4, C39	CAP 4.7uF 6.3V 0402(1005)	CAPC0402(1005)60_N, CAPC0402(1005)60_N, CAPC0402(1005)60_L	CMP-1034-02136-1		3
C2, C40	CAP 100nF 25V 0402(1005)	CAPC0402(1005)60_N, CAPC0402(1005)60_L	CMP-1034-02072-1	04023C104KAT2A	2
C3	CAP 10nF 25V 0402(1005)	CAPC0402(1005)60_N	CMP-1034-01880-1	04023C103KAT2A	1
C5, C41	CAP 22uF 6.3V 0805(2012)	CAPC0805(2012)145_N	CMP-1036-04939-1	08056D226MAT2A	2
C6, C7, C8, C16, C18, C19, C22, C25, C26, C27, C28, C29, C35, C36, C38	CAP 100nF 16V 0805(2012)	CAPC0805(2012)145_N	CMP-1036-04401-1	C0805C104K4RACTU	15
C9, C10	CAP 15pF 25V 0402(1005)	CAPC0402(1005)60_N	CMP-1034-00808-1	04023A150JAT2A	2
C11, C12	CAP 27pF 10V 0805(2012)	CAPC0805(2012)100_N	CMP-1036-01312-1	VJ0805A270KXQCW1BC	2
C13	CAP 220nF 16V 0805(2012)	CAPC0805(2012)145_N	CMP-1036-04536-1	0805YC224MAT2A	1
C14, C17	CAP 1uF 16V 0805(2012)	CAPC0805(2012)145_N	CMP-1036-04748-1	0805YC105MAT2A	2
C15	CAP 10nF 16V 0805(2012)	CAPC0805(2012)100_N	CMP-1036-03818-1	0805YC103JAT2A	1
C30	CAP 100pF 16V 0805(2012)	CAPC0805(2012)100_M	CMP-1036-01943-1	C0805C101K4GACTU	1
C31, C33	CAP 4.7nF 16V 0805(2012)	CAPC0805(2012)145_N	CMP-1036-03565-1	0805YA472KAT2A	2
C32	CAP 3.3pF 10V 0805(2012)	CAPC0805(2012)75_N	CMP-1036-00386-1	VJ0805A3R3BXQCW1BC	1
C34	CAP 12pF 25V 0805(2012)	CAPC0805(2012)100_N	CMP-1036-00938-1	08053A120JAT2A	1
D1, D2	150080YS75000	0805_A	CMP-1426-00012-1	150080YS75000	2
D3	BAT17	INF-SOT23_N	CMP-1154-00014-1		1
D4	HSMS-285C-BLKG	INF-SOT323_N	CMP-00132-1	HSMS-285C-BLKG	1
H_IN, X7, X8, X19	H_IN, Batt, Solar, Vcc Cons	Pin Header, 1x2	CMP-00100-1	68000-102HLF	4
J1, J2, J4	Solder Jumper	Small Solder Jumper	CMP-00005-1		3
J6, J7	132322	132322	CMP-00118-1	132322	2
L1	LPS4018-223MR	COILCRAFT-IND-LPS4018	CMP-00081-1	LPS4018-223MRB	1
L2	LPS4018-103MR	COILCRAFT-IND-LPS4018	CMP-00083-1	LPS4018-103MRB	1
L3	LOW18AN30NJ00D	INDC0603(1608)_N	CMP-00133-1	LOW18AN30NJ00D	1
L5	1239AS-H-100M=P2	INDC2520X10L	CMP-00241-1	1239AS-H-100M=P2	1
Q1	FDN339AN	FDN339AN	FDN339AN		1
R1, R31	7M87, 7M87 1% 0402(1005)	RESC0402(1005)_N, RESC0402(1005)_L	CMP-1011-00950-1	CRCW04027M87FKED	2
R2	7M32	RESC0402(1005)_N	CMP-1011-00947-1	CRCW04027M32FKED	1
R3	698K	RESC0402(1005)_M	CMP-1011-00832-1	CRCW0402698KFKTD	1
R4	6M81	RESC0402(1005)_M	CMP-1011-00944-1	CRCW04026M81FKED	1
R5, R7	5M49	RESC0402(1005)_N	CMP-1011-00933-1	CRCW04025M49FKED	2
R6, R32	5M23, 5M23 1% 0402(1005)	RESC0402(1005)_N, RESC0402(1005)_L	CMP-1011-00931-1	CRCW04025M23FKED	2
R8, R9	470R	RESC0603(1608)_N	CMP-1012-00066-1	CRCW0603470RJNTA	2
R10, R14, R15	1K 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00510-1	CRCW08051K00FKTA	3
R11, R16, R17, R18, R22	10K 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00623-1	CR0805-FX-1002ELF	5
R12, R13	3K3 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00567-1	RC0805FR-073K3L	2
R19	499K 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00815-1	CRCW0805499KFKTA	1
R20, R21	1M	RESC0603(1608)_M	CMP-1012-00850-1	CRCW06031M02FKTA	2
R23	84K5 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00728-1	CRCW080584K5FKTA	1
R24	1M5 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00867-1	CRCW08051M50FKTA	1
R25	1M 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00849-1	CR0805-FX-1004-ELF	1
R26	3M 1% 0805(2012)	RESC0805(2012)_N	CMP-1013-00901-1	CRCW08053M00FKEA	1
R30	7M68 1% 0402(1005)	RESC0402(1005)_L	CMP-1011-00949-1	CRCW04027M68FKED	1
R33	5M1 1% 0402(1005)	RESC0402(1005)_N	CMP-1011-00929-1	CRCW04025M10FKTD	1
Rcg1	UCR10EVHFSR050	RESC0805(2012)_N	CMP-00129-1	UCR10EVHFSR050	1
S1	SIP-5x2	SIP-5x2	SIP-5x2		1
SW1	ADTSM62RVTR	SW_DTSM-62N	CMP-00033-1	ADTSM62RVTR	1
U1	BQ25570RGRT	QFN50P350X350X100_HS-21L	CMP-00082-2	BQ25570RGRT	1
U2	MSP430FR5969IRGZT	QFN-48-7x7-4.1x4.1_N	CMP-00055-1	MSP430FR5969IRGZT	1
U3	STC3115IQT	SON50P200X60-10N	CMP-00128-1	STC3115IQT	1
U4	MPU-9250	MPU-9250	CMP-00238-1	MPU-9250	1
U5	ISL29023IROZ-T7	SON65P210X75_HS-7N	CMP-00134-1	ISL29023IROZ-T7	1
U6	SHT21	SON100P300X110_HS-7N	CMP-00136-1	SHT21	1
U7	TMP006BIYZFR	YZF0008AAHAH	CMP-0978-00003-2	TMP006BIYZFR	1
U8	BME280	BME280	CMP-00278-1	BME280	1
U9	PIC12LF1552-I/SN	M08A_N	CMP-00130-1	PIC12LF1552-I/SN	1
U10	TLV3701CDBVT	Z5+1_N	CMP-00131-1	TLV3701CDBVT	1
U11	RFM95W-868S2	RFM95W	CMP-00138-2		1
U13	TPS62736RGYR	RGY14-2050X2050TP	CMP-00239-2	TPS62736RGYR	1
X1, X2, X3, X4, X5, X6, X9, X10, X11, X12, X13, X14, X15, X16, X21, X22, X23	TX, RX, TEST, RST, VCC, GND, WU, DATA, SI, SCLK, SO, GND, VCC_ON, MCLR, Vcc, [NoValue], Batt	TSW-150-07-G-S	CMP-00008-1	68001-101HLF	17
X18, X25, X27, X28	Vcc, Vcc_ON, Batt, Gnd	TSW-150-07-G-S	CMP-00008-2	68001-101HLF	4
Y1	ABS07-32.768KHz-T	ABRA-ABS07-2_V	CMP-0447-00001-2	ABS07-32.768KHz-T	1
Y2	ABLS2-4.096MHZ-D4Y-T	ABRA-ABLS2-2_V	CMP-0277-00002-1	ABLS2-4.096MHZ-D4Y-T	1